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ABSTRACT

The purpose of this project was to demonstrate the value of establishing an operations research program within a state vocational rehabilitation agency. To reach the objectives of the project, a research director was employed in the South Carolina Vocational Rehabilitation Department (1) to stimulate and coordinate research activities throughout the state by (a) organizing a panel of research consultants, (b) conducting research conferences, (c) stimulating research by personal visits, and (d) providing consultation to other agencies; (2) to encourage the utilization of research findings by (a) conducting a systematic review of pertinent material and (b) communicating significant research and demonstration results to field personnel; and (3) to conduct research and demonstration activities within the State Vocational Rehabilitation Program through (a) statistical and follow-up research and (b) operations research studies of rehabilitation programs. The program proved to be of value particularly in developing strategies for utilizing research findings in program and staff development. The value of such a program is influenced by the interest of the administrators and supervisors in improving their programs, the level position held by the Research Director, his prior positions and rehabilitation experience, his understanding of personal and organizational growth, his set of interests and values, and the relationships he develops with the training staff, state and local supervisors, service personnel, and consultants. (Author)

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# Establishing An Operations Research Program In A State Vocational Rehabilitation Agency

Final Report: Research Project No. 12-P-55160/4-04

SOUTH CAROLINA VOCATIONAL REHABILITATION DEPARTMENT

DR. DILL D. BECKMAN, Commissioner

March, 1972

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# Significant Findings for the Rehabilitation Worker

## Stimulation and Coordination of Research

1. The demands for qualified research personnel exceeds the supply, thus causing the rehabilitation agency to compete with other agencies and organizations for their services.

2. Establishing priorities among the many topics suggested as possible research areas is not an easy task. The needs of administrative, supervisory and service personnel should all be taken into consideration.

3. A research advisory committee can be valuable in formulating research priorities and designs.

## Utilization of Research

4. Research utilization efforts must be closely related with the in-service training program if they are to be effective.

5. The training of counselors and other service personnel was more effective when supervisors were included in the planning and pre-training sessions.

6. The need for improving communication skills was identified as one of the major personnel needs at all levels.

7. Establishing an Information Resource Center was found to be valuable but an extremely time consuming activity and should be undertaken only if substantial assistance is available.

8. Research briefs are read more frequently than lengthy reports but the process of preparing briefs was found to be quite time consuming.

9. Selective distribution of resource material was felt to be more effective than broader distribution.

## Research and Demonstration Activities

10. A number of standard forms and reports were found to be more useful after modifying their titles, coded headings, dates, etc.

11. Supervisors need to be trained in interpreting and using standard forms and reports as management tools.

12. Staff development needs as perceived by counseling personnel, local supervisors, and state supervisors are highly correlated.

13. It was interesting to note the differences between the views of area supervisors and workshop supervisors concerning the best methods of improving workshop programs and increasing the number of clients served.

14. When comparing military dependents with non-military clients, differences were found in patterns of family life, community involvement, child discipline practices, vocational aspirations, and other characteristics.

# Establishing An Operations Research Program

A Project to Demonstrate the Value of Establishing an Operations Research Program In A State Vocational Rehabilitation Agency

## Final Report

RESEARCH GRANT NO. 12-P-55160/4-04

By

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March, 1972

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# ABSTRACT

ESTABLISHING AN OPERATIONS RESEARCH PROGRAM IN A STATE REHABILITATION AGENCY

The purpose of this project was to demonstrate the value of establishing an operations research program within a state vocational rehabilitation agency. To reach the objectives of the project, a research director was employed in the South Carolina Vocational Rehabilitation Department (1) to stimulate and coordinate research activities throughout the state by (a) organizing a panel of research consultants, (b) conducting research conferences, (c) stimulating research by personal visits, and (d) providing consultation to other agencies; (2) to encourage the utilization of research findings by (a) conducting a systematic review of pertinent material and (b) communicating significant research and demonstration results to field personnel; and (3) to conduct research and demonstration activities within the State Vocational Rehabilitation Program through (a) statistical and follow-up research and (b) operations research studies of rehabilitation programs.

The program proved to be of value, particularly in developing strategies for utilizing research findings in program and staff development. The value of such a program is influenced by the interest of the administrators and supervisors in improving their programs, the level position held by the Research Director, his prior positions and rehabilitation experience, his understanding of personal and organizational growth, his set of interests and values, and the relationships he develops with the training staff, state and local supervisors, service personnel, and consultants.

# PREFACE

The need for rehabilitation research in South Carolina was recognized by the state agency Commissioner and the Research and Planning Director for almost a decade before this operations research program was formally initiated in August, 1968. The program was therefore begun with several goals and activity areas in mind. As we began our venture, however, little did we realize how completely absorbed we would become in some of the organizational and sociological aspects of the program. Since we began our journey to establish a comprehensive program of operations research, we have engaged in a series of most exciting experiences and traveled through extremely challenging territory.

One of the most dramatic lessons we learned was that change does not take place in a vacuum. Anyone expecting to translate research findings and concepts into modified behavior of rehabilitation personnel or clients must develop strategy which involves personnel at all levels within the organization. For a researcher to work effectively in the area of research utilization calls for total involvement of personnel within the rehabilitation program.

The more we realized this guiding principle, the more we became involved in helping all levels of supervisors and practitioners to view themselves as change agents and essential participants in the change process. Utilization of research and knowledge in the rehabilitation field calls for a team approach. It is certainly not a venture on which an individual can travel alone.

As we review the progress made during the past four years, we recognize how much our efforts have depended upon the cooperation of many people within the agency and, in fact, many others in universities and agencies throughout the state and nation. We appreciate the trust that our rehabilitation personnel have placed in the Research and Planning Director and the spirit of adventure which they assumed as we explored new ideas together. Although our log indicates some of the usual frustrations encountered as one tries to modify existing programs in a complex organization, the journey we have taken during the past four years has been an exciting experience.

We sincerely hope that this report of our activities will benefit others who may be involved in a rehabilitation research program or be considering the possibility of establishing one.

DR. DILL D. BECKMAN,
Commissioner

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# CHAPTER 1: INTRODUCTION

## A. HISTORICAL PERSPECTIVE

The idea of establishing a research program in the South Carolina Vocational Rehabilitation Department had been germinating in the minds of several people for almost a decade before the program was formally initiated in 1968. In about 1960 and again in 1964, the state agency Director, Assistant Director, and the man who was later to become Research Director attended regional meetings in Atlanta in which rehabilitation personnel and research personnel from various colleges and universities discussed the need for research and a variety of related topics of common concern.

On frequent occasions since those meetings, discussions were held within the department concerning the need for better methods of evaluating various aspects of the program, for gaining objective information on which to make administrative decisions, for communicating available research information and demonstration program findings to appropriate personnel within the agency, and the problem of service personnel finding time to perform these functions. Recognition of the need for someone to perform these functions on a full-time basis has been growing since the initial stimulation from the regional meetings and local discussions.

An increased need for operations research was being created within the South Carolina rehabilitation program during the decade of the 60's as the program tripled in the number of clients served, personnel employed in the program, and financial support. During that time, also, a large number of workshops, evaluation centers, school rehabilitation programs, and other facilities were initiated. A cooperative rehabilitation program was initiated in almost every state institution. These were developed so rapidly that service personnel were unable to design sound evaluation programs to monitor their effectiveness. As the need for further refinement of these programs was realized, the need for methods of evaluating them became recognized by the facilities division personnel and other members of the administrative staff.

Another step toward establishing an operations research program was taken in May 1966 when the two-year Statewide Planning Program for Rehabilitation Services was initiated. At that time, the person who was later to become Research Director was serving as part-time consultant and became director of the Statewide Planning Program. He served in that capacity until the termination of the program in 1968.

As various VR personnel and other members of the statewide planning task forces became involved in the planning process, the lack of concrete data concerning many aspects of the program became quite apparent. Time and time again, questions were asked which called for specific data which was not available. The lack of valid information concerning numerous aspects of the program was one factor prompting the state agency director and the statewide planning director to write a grant proposal requesting funds to support a five-year program to demonstrate the value of establishing an operations research program within a

state rehabilitation agency. The original grant proposal was submitted January 22, 1968. The proposal was submitted as a selected demonstration project, using as a model the VRA guidelines for an Operations Research Program. Approval was received on August 15, 1968.

## B. STATEMENT OF THE PROBLEM

The purpose of this project was to establish an operations research program in a state vocational rehabilitation agency for the purpose of conducting, stimulating, and utilizing research as an aid in improving and extending the agency's program of services to disabled people.

According to the original proposal, three primary objectives were established and the research director was expected to engage in a series of 8 major activity areas throughout the project period as a means of accomplishing these objectives. The objectives and activity areas set forth in the original proposal are as follows:

1. To stimulate and coordinate research activities throughout the state which relate to vocational rehabilitation. The following procedures are proposed:

    a. Organize a Panel of Research Consultants - This panel will supplement the professional skills of the Research Director with the skills of various disciplines and professions which relate directly to vocational rehabilitation. Consultants will be drawn from research, education, industry, and community agencies within the state.

    b. Conduct Research Conferences - Research oriented persons from universities and other research institutions will be invited to participate with vocational rehabilitation personnel in a series of research conferences in order to promote knowledge and stimulate interest in the needs, resources, and opportunities for research in the vocational rehabilitation program.

    c. Make Personal Visits to Stimulate Research - The Research Director will visit institutions and agencies throughout the state to discuss the needs, resources, and opportunities for research in vocational rehabilitation.

    d. Provide Research Consultation - Consultation will be provided other agencies in their efforts to plan, conduct, and evaluate research studies and demonstration programs pertaining to the disabled.

2. To utilize research findings in the field of vocational rehabilitation and allied areas. Proposals for implementing this objective are:

    a. Conduct an on-going systematic review of research and demonstration project reports, reports of other state agency programs, journals, and related material from other sources.

    b. Select significant research and demonstration results obtained from the literature and from other state programs and impart them to administrators and field personnel for possible application.

3. To conduct research and demonstration activities within the state vocational rehabilitation program. These activities will be of two types:

   a. Statistical and followup research will be conducted, using primarily data routinely collected in the state program operations. Using existing and other readily available date, studies will be made of the types and patterns of services provided by the agency. The effectiveness of various programs and services will be examined by means of followup studies of clients. Services provided will be correlated with the subsequent psychological, social, and economic adjustment of clients. These studies will aid in determining what modifications in existing services need to be made and what new services need to be provided in order to serve clients more effectively. They also will aid in discovering needed changes in the agency's data collection and record keeping process.

   b. Operations research will involve primarily the conducting of demonstration type projects to determine the effectiveness of new services. New services to be tested will be selected on the basis of results of the statistical studies of the state program, studies of the programs of other state agencies, and the results of research and demonstration projects sponsored by the Rehabilitation Services Administration.

Preliminary planning for this research program revealed six primary needs and potential benefits.

First of all, a general administrative need existed to develop more accurate methods of examining current procedures in light of changing rehabilitation objectives and philosophy. As an initial step, we needed to study data already available in the state and local offices in a more imaginative way. It was felt that new methods of assessing available date could lead toward formulation of more precise questions, more appropriate research methods, and better planning.

It was recognized that counselors need revised perspectives of their clients as rapid changes in social and economic conditions alter rehabilitation needs, potentials, and resources. We needed to obtain more pertinent and useful descriptions of the client populations we serve and determine what variances exist in their rehabilitation processes. We needed to focus both on persons who have apparently benefited from services rendered and those who have not. Improved followup procedures needed to be established which measure both types and degrees of rehabilitation achieved.

The second need for research was to form a framework upon which we could build a broader statewide perspective regarding service patterns. New services are constantly being developed within the rehabilitation agency and outside of it. We needed to identify these resources and systematically examine their service patterns for various disability groups, indicating gaps and deficiencies. Only in this way could we hope to maximally improve service delivery systems.

Thirdly, there was a need to assess services rendered in the increasing number of specialized facilities and by specialized personnel. Counselors needed to know more about which clients actually benefit from sheltered workshops, diagnostic

centers, personal adjustment training, etc. as these services become available. New screening procedures needed to be developed to determine whether a client is likely to profit from these programs. Inter-agency hypothesizing and systematic evaluation were needed to establish improved criteria for admission to these programs. We also needed to establish improved procedures for evaluating results of facility services.

Fourth, area supervisors and other rehabilitation personnel needed assistance in developing sound methods of analyzing their service problems. It is no easy task for service personnel to translate generalized concerns into hypotheses capable of being researched. A primary benefit of research is to advance knowledge and rehabilitation skills of service personnel. It was felt that the best method of stimulating counselors' interest in procedural evaluation and in using subsequent knowledge was to involve them in planning and executing certain phases of an overall research program. We knew that new knowledge is translated into modified behavior only as it has meaning for the receiver.

A fifth need was to serve as a catalyst and consultant to others who may be interested in rehabilitation research. It was felt that many college, industry, and community planning organizations could provide valuable assistance to Vocational Rehabilitation in planning and executing research programs. It seemed that there were many persons engaged in research within the state who had not concentrated on problems of rehabilitation but who might be encouraged to do so if an organized program were initiated to stimulate their interest. Through a series of conferences, relevant research areas needed to be delineated and methods determined for stimulating others to focus on them.

Other service agencies too were interested in establishing the needs of disabled people and identifying methods of rehabilitating them. The Comprehensive Health Planning Program is an example. They needed information which would also be of value to rehabilitation personnel. Many of these people needed encouragement and assistance in developing project proposals and adequate assessment techniques which maintain standards of precision. Continued effort needs to be made to upgrade methodology of research and demonstration programs.

Finally, there was a need for the Vocational Rehabilitation Department to provide leadership in developing a "clearing house" for knowledge obtained through research and demonstration programs. A system needed to be developed for collecting, classifying, and reviewing research findings, for keeping counselors informed of productive research and demonstration programs, and for disseminating pertinent information to Vocational Rehabilitation and other personnel providing rehabilitation services.

Although it was expected that the development of this research program would benefit South Carolina directly, an additional desire was to initiate and assess procedures which could be used in other state rehabilitation programs.

## C. REVIEW OF RELEVANT LITERATURE

The scope of this research and research utilization program has been so broad that it is not as easy to focus on one type of reference material as it would be if this were a single, well-defined research study. The literature concerning

scientific approaches to gathering data in the social science field and of analyzing statistical data is too broad to attempt to relate in this report although the Research Director utilized information from numerous resources throughout the program. References concerning these matters may be obtained from standard statistics or research methods texts.

In recent years, however, a new body of knowledge has been appearing in the social science journals and in reference book form. A number of scholars have been studying methods of introducing change in complex organizations and have been recording their observations, theory, and research experiences. The writings of numerous authors concerning change agentry have been extremely valuable in helping to create a theoretical framework in which rehabilitation personnel can perform their functions of research and research utilization in a state rehabilitation agency.

The need for development of research in vocational rehabilitation was the subject of a conference in Miami Beach June 8-9, 1961. The proceedings of this meeting were recorded by Dean Darrel Mase from the University of Florida. This conference was attended by more than 40 nationally known representatives from Vocational Rehabilitation, educators, and research personnel. Similar meetings were conducted on a regional basis in Atlanta in 1960 and again in 1964.

Some of the most prolific writers and theorists in the field of change agentry have been concerned primarily with innovation in educational systems. Ronald Havelock from the University of Michigan Institute for Social Research seems to be one of the primary sources of sound theory and practical procedures. His books on Planning for Innovation and A Guide to Innovation in Education are excellent resources.

Other writers such as Edward Glaser, Terry Eidell, and Richard I. Miller have also made valuable contributions concerning knowledge production and the utilization of research and demonstration results in the field of education. The major principles and strategies of diffusing innovations outlined by these authors are as applicable in rehabilitation programs as they are in school systems.

Valuable contributions to the understanding of the processes of social change have been made by a number of sociologists. Two books by Everett M. Rogers on Diffusion of Innovations and Managing Change are helpful resource material for rehabilitation personnel concerned with research utilization. In Social Change in Complex Organizations, Gerald Hage and Michael Aiken from the University of Wisconsin Department of Sociology explore stages and strategies of change, styles of organizational change, and the importance of understanding the anatomy of orgainizations in which innovators wish to make change.

Among the writers in the industrial field are Sumner Myers from the Institute of Public Administration in Washington, D.C., and Donald G. Marquis from the M.I.T. Sloan School of Management. Their book on Successful Industrial Innovations published by the National Science Foundation may be viewed as a valuable resource.

During the past two years, a number of articles have been published in the Rehabilitation Record concerning the various aspects of research utilization,

e.g. by such writers as George Engstrom, Margaret Clark, Vaughn Hall, Ronald Havelock, and Anne Kohler. The writer has participated with these people in a series of training programs for research utilization specialists and commends their articles to the attention of anyone concerned with research utilization in the rehabilitation field.

One other type of reference book has become available within the past two years and is a valuable tool for anyone involved in rehabilitation research. Neil Dumas and John Muthard from the University of Florida have published a directory listing all rehabilitation research and demonstration projects reported from 1955-1970. These projects are listed by subject, author, grantee, and project number. A similar document, an annotated list of research and demonstration grants from 1955-1969, was prepared by the Research Utilization Branch of the SRS Office of Research, Demonstrations, and Training, and was edited by Dorothy G. Jackson. A Directory of Rehabilitation Consultants was published by John Muthard and Linda Crocker in 1971 to aid researchers and rehabilitation practitioners in locating rehabilitation consultants involved in a range of specific program activities. An Annotated Bibliography on Administering for Change has been written by three educators under the auspices of the Research for Better Schools, Inc. in Philadelphia. All four of these documents are valuable resources.

An effort has been made to note a variety of types of reference materials now available for rehabilitation personnel involved in research and research utilization. Additional references may be found in each one of the books or articles listed in the bibliography located just prior to the appendix in the back of this report.

## D. THE RESEARCH SETTING

The original headquarters for the operations research program was established in the Wade Hampton State Office Building on the same floor as the state agency's central office. This allowed easy access to the State Director and Deputy Director, other devision heads, the data processing system and the training officer. The office was located in the same building or within walking distance of most other state agencies. It was therefore quite easy to communicate with research and planning personnel in other agencies.

Soon after the first year of the program's operation, two research analysts joined the staff which made it necessary to seek larger quarters. A new office was located one block from the agency's central office and project personnel moved their quarters. The four-room suite includes an office for the project secretary, an office for the project director with space for small group meetings, an office for the two research analysts, and a multi-purpose room used as a combination research and training library and emergency work room.

Equipment to furnish these offices was provided by the state VR agency even though its funds for the year were barely sufficient to take care of increased program costs and adjustments made necessary by the new personnel classification system. As observed when other research grants have been initiated, the need exists for a change in fedearl regulations which would allow standard office equipment to be purchased from research and demonstration grant funds where the program is to be operated directly by a state Vocational Rehabilitation Department.

# CHAPTER 2: METHODOLOGY

## A. RESEARCH PERSONNEL

As indicated in the original proposal, the initial staffing of the research program consisted of a full-time Research Director and a secretary with an understanding that additional staff would be added as required. The research program was assisted by various operational, fiscal, and data processing staff members of the state agency as were required to perform the necessary research activities. A small amount of funds was also included to obtain temporary part-time services of selected research consultants. A brief description of staff roles is provided below:

### 1. Research Director

The project director suggested in the original proposal was available and assumed his duties August 15, 1968. He was appointed to the state office staff as head of the newly created Research and Planning Program. As such, he was responsible directly to the agency's Assistant Director as were all other division heads. In this position, he has had an opportunity to meet regularly with the State Director and other statelevel supervisors as a participant in the weekly staff meetings. In addition, he has had direct access at any time to the Assistant Director and Director for any planning conferences that were necessary.

The Research and Planning Director has a doctoral degree in sociology with research training and clinical training related to vocational rehabilitation. He has had experience in conducting research, has published articles in professional and scientific journals, and has almost 15 years experience in vocational rehabilitation. The official job description published in the agency's Job Class Specifications Manual is provided in Appendix A. A biographical sketch of the Research and Planning Director is included in Appendix B.

### 2. Secretary

Under the general supervision of the Research and Planning Director, the Secretary has developed a system for cataloging research, planning, and staff development information. She has maintained a variety of records and reports relating to the research program. In addition to routine secretarial duties, she has kept records useful in analyzing the evolution of this program as it has progressed through its various phases.

At appropriate times, the secretary has assisted local rehabilitation personnel in understanding procedures for recording or collecting needed information. She has communicated with appropriate sources to gain general information helpful in planning, executing, or interpreting research. She has assisted in the preparation of statistical data into tables, charts, graphs, etc. so that they can be more easily communicated to service and administrative personnel.

She has been particularly helpful to the program by preparing material used in various staff training programs and by performing the behind-the-scenes

duties that have enabled us to conduct fruitful training and research utilization conferences. She has also played a major role in the preparation of numerous research grant proposals and reports, speeches, position papers, research briefs, and other materials produced in the program.

3. Consultants

Consultants on special problems were employed on a part-time basis as the need arose. They were selected from the fields of psychology, rehabilitation counseling, sociology, social work, statistics, and educational counseling.

For about a year during the project, a full-time research analyst and another part-time research analyst were employed to help conduct research associated with a research and demonstration project in the lower part of the state. At the present time, two doctoral level researchers from the University of South Carolina are performing these research duties on a part-time basis. The Research and Planning Director has been responsible for training and supervising these personnel as part of his administrative duties.

## B. ACTIVITY PERSPECTIVE AND REPORT FORMAT

The first year of this program might be appropriately called the organizational or exploratory phase. During this period, the project director made the transition from his former Statewide Planning Program functions and systematically took steps to establish his new role within the agency as Director of Research and Planning. He built a series of relationships with key personnel within the agency, established channels of communcation within the agency and among university personnel, conducted a series of local research orientation conferences, gathered and disseminated readily available data, provided technical assistance to VR personnel needing operational data for planning purposes, and consulted with numerous personnel within the agency and other special programs regarding both research procedures and innovative processes.

As we approach the end of the fourth year of this program and review the progress to date, we see that the past two years have been most productive ones. Moving past the organizational phase, the project director has taken macroscopic approach to the organization in an effort to assure that individual activities blend together in such a manner as to reinforce each other. The emphasis this year and last has been on developing an atmosphere within the agency as a whole which will be conducive to maximum participation in future research and research utilization efforts.

Program activities have been many and varied. In an effort to provide maximum information in this report concerning the developing role of an operations research program in a state rehabilitation agency, an inventory system of reporting will be used in so far as possible. The emphasis will be placed on relating goals, major procedures, and their rational rather than enumerating all of the day-by-day research activities or listing specific information distributed to agency personnel.

It should be kept in mind, however, that the director has been engaged in a wide range of activities during the past few years and a number of them are

so complex that they are related to two and sometimes all three objectives. Hopefully, this inter-relationship of activities is an indication that our efforts related to the three major project goals are being systematically intertwined into a unified program.

As an aid to an orderly progression through this final report, project activities will be related in an order corresponding to the three major program objectives: (1) stimulation and coordination of research, (2) promoting utilization of research findings, and (3) conducting research and demonstration activities.

## C. STIMULATION AND COORDINATION OF RESEARCH

### 1. Six Research and Training Districts Established

To facilitate coordination of research at the local level and decentralize staff development activities, six research and training districts were established. Personnel within each of these districts seem to have fairly common problems and concerns. They tend to use the same set of community resources and work more closely with each other than they do with rehabilitation personnel in other portions of the state. Being careful not to encourage division within the agency, the project director has attempted to foster an identification among personnel within each one of these districts so that they can call upon each other for mutual aid and guidance as they conduct their program assessment and refinement activities. It is within these six districts that the project director has been conducting research orientation sessions.

### 2. Local Research Consultants Recruited

Soon after the program was initiated, the Research and Planning Director began to establish relationships with potential research consultants throughout the state, particularly at the University of South Carolina, Clemson University, Winthrop College, and several branches of the University of South Carolina. Conferences were held with personnel in the fields of vocational rehabilitation, psychology, education, sociology, social work, and industrial management to discuss the needs, resources, and opportunities for research in the vocational rehabilitation program.

Although a number of university personnel expressed an interest in becoming involved in the vocational rehabilitation program, it soon became apparent that a limited number of them were willing to establish an on-going relationship requiring any significant amount of time without receiving compensation. The demand for personnel with any degree of expertise in research far exceeds the demand in South Carolina and the opportunities for part-time employment are numerous. For this reason, it has been somewhat difficult to gain and maintain a "working committee" of research consultants who would serve on a volunteer basis. The director also found it extremely important to screen potential consultants carefully before bringing them together with local rehabilitation personnel. Many professional people with high academic qualifications are neither interested in nor capable of participating in research activities. In fact, several were found who have such views toward research that they might well discourage rehabilitation personnel from developing an analytical approach

to their program activities. In addition, some consultants suggested are qualified but are more interested in staff development, communications, or consulting with the staff regarding psychological or sociological aspects of their clients than they are in engaging in research activities.

Despite these problems, the director has continued to establish relationships with potential research consultants throughout the state, exploring and categorizing the special interests and competency areas of each. An on-going effort has been made to acquaint rehabilitation supervisors with all consultants who live within commuting distance of their office, creating opportunities to get them together when time permits.

3. Team Involvement of University Consultants

During the third year of the program, an effort was made to mobilize teams of research and staff development consultants to focus on particular problems or programs. For example, as part of our in-service training program, we initiated a three-phase video tape training session in each of the training and research districts around the state. To establish this training program on a sound theoretical and research base, personnel from the University rehabilitation counseling, school counseling, and educational research programs were mobilized to help develop it. One consultant interviewed rehabilitation personnel to define the most difficult problems they encounter during the plan-making stage. Another member of the team developed a statewide survey to elicit suggestions regarding the content and method of these training sessions. A member of the rehabilitation counseling faculty at the University searched the files in a local rehabilitation office to develop a series of simulated problem situations to be used for small group discussions and role playing. Through this coordinated effort of members of the research and training staff and University consultants, knowledge found through a systematic approach to the problem were introduced into the staff development program.

4. Advisory Groups Formed

Three types of groups have been organized during the project period to aid the research program in carrying out its objectives. Early in the program, a representative from each VR district in the state was asked to serve as a member of a "grass roots" advisory panel to help the research staff define training needs and evaluate the effectiveness of training programs. It was expected that the participation of these representatives would help them become more aware of effective training and program evaluation techniques and be able to utilize these methods in their own programs.

Early in the project's third year, plans were developed for all statelevel supervisory personnel to meet monthly to discuss methods of improving the program and to coordinate their planning efforts. This group was asked to serve as an advisory panel to the research and training programs. A series of staff development concepts were formulated by the Research and Planning Director and were presented to this administrative advisory group to determine the degree of concensus within the agency regarding appropriate principles and methods of staff development. This was done as one step toward developing a comprehensive system of staff development.

Members of this administrative advisory committee assisted in screening research suggestions, establishing priorities, formulating appropriate designs, mobilizing the participation of service personnel, and planning research utilization strategies.

A third advisory group, a panel of outside research consultants, was created early in the program but has since become defunct after several key members moved or resigned due to other demands on their time. Beginning with this fiscal year, however, a new and broader based advisory committee is being established. This nine-man committee will initially include four persons from universities, two from other agencies, two from industry, and one other person. Three of these are handicapped individuals.

5. Local Research Orientation Meetings

Although plans were initially made for a statewide research conference to bring together research and vocational rehabilitation personnel, plans were revised to include a series of smaller conferences in six sections of the state. It was felt that working in smaller groups would allow a far greater degree of participant involvement and would also enable us to involve and evaluate the competency of our local research consultants.

Throughout the project period, a series of research orientation meetings were conducted in local offices. Both supervisory and counseling personnel have participated. The objectives of these meetings were five-fold: (1) to obtain grass roots definitions of program evaluation and staff development needs, (2) to determine the names of professional people in each area who may serve as local research and program development consultants, (3) to stimulate interest in program assessment and research utilization at the local level, (4) to equip VR personnel with the tools to interpret research findings, and (5) to encourage them to develop themselves as change agents within the organization.

For the research office to become a vital part of the agency's operation, a significant portion of its activities must have meaning for local level personnel. The only way that this can be done is to continue to obtain feedback from these people regarding their needs and help them find answers to their questions.

6. Consultation Visits With Local VR Personnel

The Research and Planning Director has made regular visits throughout the state to consult with local rehabilitation personnel. He has met with eight area supervisors and ten facility supervisors to discuss various aspects of program evaluation of immediate concern to them. He has also consulted with individual counselors, evaluators, and social workers.

During these consultation visits, the topics discussed most frequently were (1) program refinement needs, (2) staff development needs and techniques which might be fruitful, (3) needs for new knowledge or interpretation of existing data, (4) methods of introducing orderly change within an organization, (5) methods of defusing some of the tension arising among personnel

within the organization, (6) roles of various staff members, (7) coordination of programs and (8) resource people in their area of the state.

One purpose of these visits was to determine potentially fruitful areas of program evaluation in which local personnel might engage. As such areas were identified, the personnel involved were helped to develop appropriate assessment techniques.

As a result of these consultation visits, several supervisors seem to be looking at their problems more from an organizational viewpoint than they previously did. The number of phone calls from these supervisors has increased as they have begun to view the Research and Planning Director as someone with whom they can think through some of their program innovation needs and strategies.

7. State-Level Consultation

The Research and Planning Director is a member of the agency's top level administrative staff and, as such, attends the regular weekly meetings with the state agency director and other division heads. In these meetings, he has had an opportunity to help interpret a variety of operational data and to serve in a general consultative capacity.

8. Consultation to Other Agencies

The project director has been called upon to represent the Vocational Rehabilitation Department as a consultant to several research, planning, and service programs. He has also consulted with interagency groups concerned with rehabilitation programs for youthful offenders, mental retardation, alcoholism, creation of halfway houses for clients who have had emotional disorders, interagency compatible statistical reporting systems, creation of a graduate training program for health facility management personnel, and a TEC center program for technical level community and mental health workers. A sizeable number of hours were devoted to consulting with Urban League representatives concerning a research and demonstration grant they submitted to develop a system of training support personnel for social and rehabilitation service agencies.

The Research and Planning Director has served on the Advisory Board of several interagency research or demonstration programs in which the VR agency has a vital interest. He has reviewed R & D project proposals being submitted to Washington by several university departments and SRS agencies, advising the administration concerning their relevance to the VR program, and consulting with personnel from the applicant organizations on methods of strengthening research and program methodology.

His increased awareness of research utilization concepts and techniques has been a factor in prompting an increasing number of organizations to seek the director's consultation. Listed below are some of the key organizations for whom extensive consultation services have been provided:

S. C. Council on Aging - Proposed knowledge utilization project.
S. C. Arthritis Foundation - A program to develop community interest and support.
S. C. State College - Proposed speech and hearing program for black youth.

Baptist College - Proposed guidance and educational program for disabled students.

Clemson University - Proposed graduate training program for health facility management personnel.

Midlands Technical Education Center - Community and mental health technician training program.

Urban League - Proposed R & D project to train support personnel for SRS agencies.

U.S.C. - Graduate rehabilitation counselor training program.

U.S.C. - Undergraduate program for recruiting students into rehabilitation professions.

U.S.C. - Proposed research program on the economic aspects of alcoholism.

Adolescent Resources Center - A mental health intervention program for junior high school age children.

Beaufort County R & D Project - A rehabilitation program for youthful dependents of military personnel.

D.P.W. - A training program for social workers utilizing educational television.

S. C. Heart Association Regional Medical Program - Proposed demonstration program utilizing modern research utilization concepts and techniques.

Department of Juvenile Corrections - Several Law Enforcement Act programs including a reception and evaluation center, a community intervention program, an in-service training program, and a rehabilitation services program.

State Planning and Grants Division - Several Law Enforcement Act programs including a volunteer services program, manpower training programs, and community involvement programs.

9. Statistical Representatives Association

At the request of the governor, the Division of Statistical Research of the Budget and Control Board initiated an organization comprised of the statistical representatives of all major state and federal agencies within South Carolina. From the inception of this organization, the Research Director has worked cooperatively with the group to help bring about a closer relationship between research, statistical, and planning efforts. This committee serves as a central statistical clearing house and a means of providing data collection, data output, and exchange of information about the various agencies. Representatives of 45 agencies meet monthly to share information about their programs, activities, findings, and methodology.

## D. UTILIZATION OF RESEARCH FINDINGS

The original project goal concerning utilization of research has assumed a far greater significance and resulted in a much larger number of activities than anticipated when the project was initiated.

To effectively promote the utilization of research findings requires the use of a variety of techniques. On the one hand, a continuous flow of ideas and information to rehabilitation personnel must be maintained. Examples of activities of this type will be reported in this section.

On the other hand, an atmosphere needs to be created within an organization which stimulates significant personnel to reach out for new knowledge. A system needs to be created for processing new ideas and information through the organization so that they become translated into actual changes in the way supervisors act toward their employees and counselors act toward their clients. An analogy may be made with the body's system of processing food so that it is translated into new tissue, bone and energy.

As indicated in this section, the Research and Planning Director worked cooperatively with the agency's Deputy Director and state supervisors to create this type of system and atmosphere within the agency.

1. Goal for the Year Established

The major goal for the third year of the project was to explore methods of introducing knowledge concerning staff training and supervisory techniques into the agency so that all personnel become more skilled in helping others to grow. In addition, a concerted effort was made to explore methods of involving personnel more enthusiastically in the learning process.

2. Program Development Staff Conferences Initiated

Several concerted efforts were made to strengthen the role of the agency's state and local leadership. For the first time, all state supervisors and field officers were brought together on a regular basis to analyze agency problems and formulate strategy for solving them. One of the key functions of this Program Development Staff Conference was to provide guidance to the research and training programs and to help interpret the findings of operational research studies.

Throughout this series of meetings, the agency's top leadership considered the findings of numerous researchers and theoreticians to determine ways of strengthening communication channels and serving more effectively as consultants to local personnel.

3. Training Becomes a Key Element in Research Utilization

Throughout the past three years, the project director has been embroiled in numerous activities related to utilization of research findings. These involvements have convinced him that research utilization efforts must blend with those of the staff member responsible for in-service training. Any major program innovations must be accompanied by or, in fact, preceded by concerted staff development activities.

In keeping with this conviction, a considerable portion of time was spent working cooperatively with the agency's training officer. Part of this time was spent researching staff development needs but even more time was devoted to experimenting with methods of bringing about change within the agency. Through this process a number of principles and procedures for staff development were defined and communicated to appropriate personnel.

For an extended period of time in which the agency had no training officer, the Research and Planning Director assumed the training functions. During this period, training and research utilization activities were intertwined in an extremely close manner.

4. Decentralized Basic Training Program Initiated

A series of five Basic Training Programs was initiated in each of the six research and training districts as a means of involving small groups of agency practitioners in the process of studying new ideas and techniques. This involved conducting a series of meetings with state supervisory personnel to plan general goals and content of basic training programs, selecting steering committees in the six training districts, distributing memos and maps explaining training district and steering committee concepts, conducting a two-day training program for state supervisors to develop strategy of translating general plans into local action, developing basic guidelines and instructions to committees, and maintaining continuous contact with statelevel advisors and steering committees.

For the first time, local steering committees were encouraged to take major responsibility for planning and conducting staff development programs.

The Research and Planning Director coordinated these thirty local programs, providing steering committees with information about conference and training methods, developed visual aids and other instructional materials, compiled a list of available resource people, and kept communications flowing between the thirty steering committee members, state and local supervisory personnel, and participants.

5. An On-going Leadership Training Program Conducted

An on-going instructional program was conducted for area supervisors, facility coordinators, and basic training program steering committee members to increase their knowledge of training methods and group processes. The Research and Planning Director searched the literature for materials related to our leadership training needs, abstracted materials and synthesized it into a readable form, distributed it to appropriate personnel, and discussed it at steering committee meetings, area staff meetings, and with interested individuals.

6. Strategy Developed for Training All Agency Personnel in Communication Skills

The need for improving communication skills was identified as one of the major needs which much be met if an organization expects to utilize new knowledge effectively. Recognizing this, members of the Professional Development Staff Conference and the U.S.C. counselor training program were asked to study a variety of possible techniques and help develop a strategy for involving agency personnel in a series of communication skills training programs. An effective system was devised which included high interaction in small groups, the use of actual problem situations, an empathy rating scale, continuous self-group evaluation, and opportunities for participants to practice their newfound skills with video tape feedback.

The agency's power structure was carefully analyzed to identify persons apt to be most receptive to the new concepts and ones who might resist them. Groundwork was laid to reduce resistance and gain strategic support. Introduction of this communication skills training into the practitioner level of the agency was thereby made with strong support from the agency's leadership.

7. Support Personnel Program

The Research and Planning Director has attended three regional meetings in which the utilization of support personnel was discussed. Job descriptions for two levels of workers were written at one meeting in Atlanta. A number of programs using sub-professional workers have been initiated during the past few years but very little concrete research data has been reported. Even so, a number of insights have been gained through reading project reports. An effort was made to disseminate this information to state agency personnel to encourage them to begin thinking about how such people might be used in our state agency. Follow-up sessions were conducted with several supervisory personnel who are considered most likely to initiate programs using support personnel.

8. Information Resource Center Established

The Research and Planning Office has established an "Information Resource Center" so that the staff can be kept informed of current approaches, advances, improvements, and research related to key aspects of rehabilitation. This Center contains books, articles, research and demonstration reports, research briefs, video tapes, films, slides, and other visual aids in addition to reports of research conducted by state office personnel. Memos have been distributed to all state and local supervisory personnel to create an awareness of the materials available.

Early in the program, the project director surveyed what information was already being collected within the agency to determine what portion of it might be of value to others not then receiving it. He found that some of it was not being used maximally and would probably be of little value to others in its present form. For example, several reports being printed by the IBM machine did not have sufficient explanations accompanying them to allow supervisory personnel to interpret the data correctly. With proper interpretation and slight modification of the reports, they could be read much more easily and accurately. Several forms have been revised to make them more valuable as management tools.

As indicated previously, the project director consulted with area and facility supervisors to determine their interests and needs. As these were identified, an effort was made to send each supervisor pertinent information as it was discovered. Reprints of articles were obtained and distributed to supervisor and counseling personnel requesting them.

The project director has distributed excerpts from books, pamphlets, journals, and reports. Some of these have been distributed only to a few people concerned with a particular aspect of rehabilitation while others have been distributed widely. For example, excerpts have been taken from "Continuing Education for Rehabilitation Counselors", "Communications or the Transfer of Meaning", "Supportive Personnel in Rehabilitation Centers", "Alcohol Problems: A Report to the Nation", "Crime, Corrections and Society", and several Statewide Planning Reports.

Articles have also been brought to the attention of appropriate agency personnel, e.g. "Industry and Rehabilitation Cooperate for the Disadvantaged" from the Rehabilitation Record, "Change in America: What 1970 Census Will Show" from the U. S. News and World Report and a variety of articles concerning methods of bringing about innovation within the rehabilitation program.

Portions of several books and reports have been extracted for use in training conferences, e.g. excerpts from "The Development of Research in Vocational Rehabilitation" edited by Darrel Mase, "The Art and Science of Teaching" prepared by the West Virginia R and T Center, and "Knowledge into Action: Improving the Nation's Use of the Social Sciences."

Research briefs published by the Research Utilization Branch, SRS News Releases, HEW News, and other documents distributed by the Social and Rehabilitation Service have been distributed to personnel throughout the agency. Many times, these distributions have been accompanied by a personal note from the project director indicating the people he feels would profit most from them or indicating the particular program to which they most clearly relate.

A limited number of research briefs have been prepared and distributed by the project director. To prepare relevant briefs requires reading a large number of research reports, pamphlets, articles, and books gleaned from a variety of sources, summarizing significant ones, and preparing them in a readable form. This was found to be quite time consuming.

Some information has been distributed strategically to encourage key personnel to think about their role in promoting state and national priorities, e.g. the utilization of support personnel and the rehabilitation of welfare recipients, drug addicts, alcoholics, public offenders, and persons with behavioral disorders. Follow-up sessions have been conducted with personnel most likely to utilize the information.

9. Audio-Visual Materials Developed

Early in the program, a narrated slide series was developed showing the operation of our statewide facilities for use in staff orientation and public information programs. This involved contacting supervisors to determine slides presently available, previewing and arranging slides in a logical order, planning slides needed, arranging the photographic schedule, writing scripts, adding research information about the program, making copies and distributing the slide series.

An attempt was made to produce a video tape "documentary" showing communications skills concepts, training techniques, and the process we used to introduce this innovation into the VR Agency program.

10. Nationwide Communications

The Research and Planning Director has participated with about twenty other rehabilitation people from throughout the nation in a series of SRS sponsored training programs for research utilization specialists. Members of this group met twice yearly to learn research utilization techniques, share experiences, and inform each other of research resources.

Semi-yearly meetings of the Region IV Rehabilitation Research Council have also provided opportunities to become personally acquainted with research personnel within the region and to determine interest and competency areas of each.

Participation in two regional manpower utilization conferences in Birmingham, Alabama, and Savannah, Georgia, has helped the director gain insights into alternative patterns of manpower usage.

Communication has been initiated with a number of educators throughout the country who are interested in training educational change agents, e.g. Ron Havelock, Ron Lippett, Ed Glaser, and Ev Rogers.

Informal newsletters have been circulated by research utilization personnel and by research and training centers to increase communication between research utilization specialists, researchers, educators, practitioners, and administrators. The Change Agent was distributed from South Carolina to about 300 professional personnel throughout the nation. All of these people may be considered potential consultants for future research and research utilization efforts.

## E. RESEARCH AND DEMONSTRATION ACTIVITIES

When the program first began, as an initial approach to identifying productive research areas, the Research and Planning Director analyzed data already available on IBM cards regarding active caseloads and cases closed during the past several years. Sub-group profiles were constructed for clients according to status of closure, for each primary disability, for each area office, and for other subgroups. The Director shared these findings with service personnel as a means of helping to establish the research office as a source of information.

Since that time, a series of fairly large-scale research activities have been undertaken. Due to space limitations, only a few representative types of research studies will be mentioned in this report.

### 1. Staff Development Research Conducted

A research study was conducted to determine staff development needs as defined by supervisory personnel as a basis for establishing the 1970-71 training schedule. This involved collecting suggestions for needed training topics from a variety of individuals throughout the program and other sources, grouping these into topic categories, conducting a meeting of state supervisory staff to gain further suggestions and instructing them in rating systems, obtaining ratings from state and local supervisors of their priority, timetable, and participants needing each type, analyzing results, and feeding back the findings to administrative and supervisory personnel.

A survey was conducted to determine all rehabilitation-related graduate courses offered in the state's colleges and universities. The information obtained was analyzed and conferences were held with selected deans and department heads regarding course content and regulations. Meetings were then held with VR and USC personnel to arrive at a list of courses suitable for inclusion in the agency's in-service training program.

A study was conducted to determine the graduate school status of all rehabilitation personnel, courses previously taken, and formal training desires for the future. This information was used to establish new policies regarding educational development programs.

2. Workshop Study Conducted

A study was conducted by the Research and Planning Director to obtain suggested methods for improving workshop programs and increasing the number of clients served. The initial suggestions for improving workshop programs were obtained from area supervisors and workshop coordinators in a series of group sessions. These suggestions were then classified according to stages in the process. A survey form was then distributed with the request that they rank these suggestions in order of their greatest contribution toward increasing the number of clients served. The results have helped identify methods for improving workshop programs. It was interesting to note the difference between the views of area supervisors and workshop coordinators concerning priorities.

3. Beaufort Research and Demonstration Project

The Research and Planning Director has provided general supervision and coordination of the research activities conducted in the Beaufort research and demonstration project for dependents of military personnel. He wrote the original grant request and served as project director during the program's first year but has since supervised only the research portion of the program.

The research office has monitored the flow of clients through the project and has consulted with the staff to help them gain a better perspective of the characteristics of the clients they serve and the significance of these for their rehabilitation needs. A survey form was designed to help the staff obtain information from military families regarding several significant aspects of their family life, community involvement, previous military experiences, and child-rearing techniques. This same information was obtained from non-military families with children in the program. Comparisons were made and several significant differences were found. The final report is being written at the present time.

4. Public Assistance Recipients Expansion Grant

After compiling information concerning the distribution of welfare recipients and determining the state's highest incidence counties, the Research and Planning Director composed the original draft of an Expansion Grant to Develop Rehabilitation Teams to Service Public Assistance Recipients in South Carolina. This is an example of numerous program proposals for which he has developed the supportive data and/or justification.

5. Resources for Drug Abuse Clients in South Carolina

At the request of the Governor, several selected agencies were asked to prepare a proposal indicating what type of services the agency could presently commit to the rehabilitation of drug abuse clients and the services they might be able to render if funds became available to expand their service programs in this area. As he has on numerous occasions of this type, the Research and

Planning Director conducted a survey to determine the necessary information, made the necessary projections for future programs, and wrote the proposal for submission to the Governor's office.

6. Comprehensive Areawide Studies

A six-man statelevel study group has visited rehabilitation programs in five VR areas of the state as part of a statewide survey of service delivery systems. The Research and Planning Director has served as executive secretary of the group and has been responsible for collecting supportive data, arranging the findings into an orderly fashion, and writing the final report concerning each area.

This is the first time that the Assistant Commissioner and all division supervisors have made a comprehensive study of the service programs and personnel functions in each area. The purpose of these studies is to take stock of current programs, define needs, seek methods of improving programs, solicit suggestions regarding priorities, and to formulate both short-range and long-range goals for the area. A number of significant program and personnel changes have been made as a result of these studies.

7. Local Personnel Involved in Conducting Research

A special effort has been made during the past two years to mobilize teams of local VR personnel to focus on particular problems or programs and become involved in the research aspect of the process. For example, the director coordinated the research activities of several counselors as they interviewed rehabilitation personnel to determine the most difficult problems they encounter during the planmaking stage. Other counselors searched the files of local offices and facilities for representative examples of problem situations. After the information was anlyzed, it was used as the basis for developing a series of simulation situations to be presented during subsequent training programs.

In addition, at least one person in each of eight expansion or innovation grant programs is responsible on a part-time basis for obtaining evaluation data concerning the program and the clients being served, e.g. the Area Rehabilitation Center Project in Walterboro, the Model Cities Project in Spartanburg, the PeeDee Mobile Evaluation Unit, the project to develop rehabilitation teams to service public assistance recipients around the state, the programs to demonstrate the value of psychologists and social workers, and the Law Enforcement Assistance Program working with Family Court clients. At least one person in each of these programs is administratively responsible for their client service activity to someone else but is responsible to the Research and Planning Director for their research activities.

During special times, a large number of personnel throughout the agency are performing research activities. For example, in a recent follow-up study of 300 former rehabilitation clients, a research form was developed and about 40 counselors interviewed former clients to collect research data. After the results are tabulated and preliminary analyses are made, the information will be shared with the Commissioner and the Assistant Commissioner to decide how best to use the information in program planning and staff development.

8. Other Research Activities Completed

Throughout the past several years, a series of small research studies have been conducted and a sizeable quantity of specific data has been obtained for use by various supervisory personnel and practitioners. It is interesting to note that specialty counselors tend to request information far more than counselors carrying general caseloads.

The greatest number of requests for specific information has come from local level personnel during consultation visits to local offices or during small group discussions in training or research utilization conferences.

Listed below are examples of the types of program evaluation research conducted during the past year:

a. Survey of the academic preparation of all professional personnel.
b. Study of staff interest in graduate study, present graduate status, etc.
c. Studies to identify various types of training needs.
d. An Analysis of previous statewide planning recommendations to determine the degree of implementation.
e. Evaluation of the communication skills training program.
f. An evaluation of the use of ETV as a medium for training social workers.
g. Evaluation of the social work conference.
h. Follow-up study of a sample of 300 cases closed rehabilitated.
i. Follow-up study of 200 alcoholic clients served in Palmetto Center.
j. A study to determine staff receptivity to video tape training.
k. An analysis of the distribution of psychological services throughout the state.
l. An evaluation of Basic Training Programs.

9. Research in Progress and Proposed

a. Study typical work week and role of social workers, desired changes in their role, and supervisory expectancies.
b. Study caseload size of all personnel and time spent on different types of clients, explore reasons for variations, develop a system of weights, and create a system of categorizing yearly caseload expectancies.
c. Analyze the current and potential use of funds from other agencies and organizations to help rehabilitate VR clients.
d. Study staff attitudes regarding state and national rehabilitation trends and changes in goals and practices.
e. Study staff attitudes toward clients being served in the newer programs.
f. Explore methods of using video tape equipment in research and research utilization.
g. Determine research topics of current priority to local supervisors, counselors, and state supervisory personnel.
h. Develop program evaluation systems for expansion grant programs and other innovative efforts, e.g. the Walterboro project for public assistance recipients, the PeeDee Mobile Evaluation Unit, the Model Cities program in Spartanburg.

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i. Develop systems of measuring the program and role changes resulting from the inclusion of social workers and psychologists in local rehabilitation offices and facilities.

j. Conduct a follow-up study of clients transferred out from correctional institutions to determine their current status in relation to institutional programs and community services rendered.

# CHAPTER 3: RESULTS

In most research project reports, the chapter in which the results are reported is the longest as the findings are considered to be the most essential ingredient of the program. In a demonstration report such as this, a description of the methods used in accomplishing the goals of the program assumes a far greater significance and therefore takes more space in the total project report than does the chapter on results.

This report of research findings will include only those which seem to have the greatest significance. The same format will be followed in reporting the results as was followed in the methodology section.

## A. STIMULATION AND COORDINATION OF RESEARCH

The task of stimulating local research was found to be easier when the program was decentralized, i.e. after the statewide network of programs was divided into six research and training districts. This made definable units in which the Research and Planning Director could operate.

The number of qualified research consultants capable of helping local rehabilitation personnel evaluate their programs was not as large as it was initially expected as many potential consultants were not found to be qualified or to have an interest in research. In addition, the demand for research personnel in South Carolina was found to be far greater than the supply of capable researchers. This affected the number available to serve even with compensation and seriously affected the number available as volunteer consultants.

It was found to be extremely valuable to involve a range of university consultants in the research utilization and training aspects of the program although it sometimes took a great deal of effort on the part of the Research and Planning Director and the Training Director to assure that the services provided by university personnel were geared to meet the needs of agency personnel.

Getting suggestions from administrators, supervisors, and practitioners concerning possible areas of research was easy as there are many problems and unmet needs in any changing program such as vocational rehabilitation. The task of establishing priorities among these suggestions was found to be much more difficult. In addition, some of the problems suggested for research were found to be matters which in the final analysis would probably be resolved by precedent or value judgment rather than on the basis of research findings, so the Research and Planning Director was reluctant to devote a great deal of his energies to such subjects.

It was found to be a somewhat difficult task to arrive at a meaningful role for a research advisory committee. A decision regarding the composition of this committee was also somewhat difficult to reach as the number needed to be limited but value could be seen in having a wide variety of resource people on such a committee.

For a research program to become a vital part of the agency's operation, a significant portion of its activities must have meaning for local level personnel. The best way that this can be accomplished is to maintain close relationships with local personnel to obtain feedback regarding their needs and engage in a series of activities with them to help them find solutions to their problems.

During consultation visits to local offices and facilities, the most frequently discussed items concerned (1) program refinement needs, (2) staff development needs and techniques, (3) needs for new knowledge, (4) methods of introducing orderly change within our organization, (5) methods of increasing morale, (6) roles of various staff members, (7) coordination of programs, and (8) utilization of outside resources.

By being in a staff position prior to his appointment as Research and Planning Director, it was probably easier for VR personnel to understand and accept his "neutral" role than it would have been if he had been in a line position.

It was found to be important that the Research and Planning Director be a member of the agency's top level administrative staff so that he is constantly aware of changes taking place in the agency and is familiar with the organizational framework in which plans and decisions are made. Knowledge of this context is essential to help him interpret research findings and perform his planning functions.

As part of his responsibility as a member of the statelevel staff, the Research and Planning Director was called upon to represent the agency at a large number of meetings and become involved in a significant amount of activity which may be considered administrative rather than being directly related to the research program. Although this must be expected to a certain extent, it tends to reduce the quantity and quality of his research and research utilization activities.

As the Research and Planning Director began concentrating on concepts of change agentry and strategies for stimulating program and staff growth, he found personnel in other agencies and organizations keenly interested in these ideas. This led to his being invited to serve as consultant to an increased number of special projects and planning programs.

## B. UTILIZATION OF RESEARCH FINDINGS

The original project goal concerning research utilization was found to assume a far greater significance and resulted in a much larger number of activities being undertaken than anticipated when the project was initiated. More time was devoted to this aspect of the program than to any other.

Research utilization efforts must blend with those of the staff member responsible for in-service training if they are to be effective. Any major program innovations must be accompanied by concerted staff development activities.

When the Research and Planning Director becomes involved extensively in staff development activities, he is able to find many ways of helping personnel become aware of research and demonstration program findings and conclusions.

Unless the researcher keeps "change registers" as well informed of innovative practices as he does "early innovators", he will be inadvertently contributing to the knowledge gap between them. Equal treatment is difficult to do as the "early innovators" tend to reach out more eagerly for new ideas.

Rehabilitation personnel do not fully utilize knowledge readily available to them and are not well equipped to absorb highly sophisticated new knowledge until they have been taught to use what they have around them.

Training sessions for the agency's top level supervisory staff were found to be extremely valuable in setting the stage for communicating and demonstrating modified practices to local supervisory personnel and practitioners. The local training tended to be reinforced to a greater extent when they were asked to become a part of developing the strategies for introducing innovation into the program. The same principle of involvement increasing reinforcement was found to be true when junior level supervisors were included in pre-training sessions.

The need for improving communication skills was identified as one of the major needs which must be met if an organization expects to utilize new knowledge effectively. When instructional programs in communication skills were introduced, they seemed to be received with equal enthusiasm at all levels. It was interesting to note that personnel at each level felt that the persons above them in the hierarchy were the ones who needed improved communication skills the most.

As efforts were made to disseminate information concerning programs in which support personnel were utilized, there seemed to be a general acceptance of the idea but certain resistances expressed in terms of problems this might cause "other people."

Establishing an Information Resource Center was found to be valuable but an extremely time consuming activity. This normally should be undertaken only if substantial secretarial assistance is available or arrangements can be made to employ someone to serve as librarian.

Specialty counselors tend to request information from Information Resource Centers far more frequently than do counselors carrying general caseloads.

Distribution of project reports and other large volumes to rehabilitation personnel does not seem to be a satisfactory means of disseminating information as follow-up studies showed that very few people had read such reports.

Research briefs are read far more frequently than lengthy reports but there is no substantial evidence that the reading of these has led to any significant change in behavior on the part of practitioners.

The process of preparing research briefs from larger volumes was found to be a time consuming activity and was therefore one which did not get done as frequently as originally intended.

It was felt that selective distribution of resource material to key personnel with notes bringing it to their attention was more effective than broader distribution of material although no definite research was conducted to prove this hypothesis.

During the early stages of this operations research program, it was both stimulating and comforting to the Research and Planning Director to participate in the series of SRS sponsored programs for Research Utilization Specialists. Many ideas presented by the other participants in these meetings were incorporated into the South Carolina program.

## C. RESEARCH AND DEMONSTRATION ACTIVITIES

Soon after the operations research program was initiated, it was found that a number of standard forms and reports being used in the agency could be improved by modifying their titles, clarifying coded headings, making the dates more complete, etc.

It was also found that many of the standard forms and reports being used in the agency became more useful after supervisory personnel were trained in interpreting them and using them as management tools.

When research was conducted to determine staff development needs as perceived by counseling personnel, local supervisors, and state supervisors, it was interesting to note how highly correlated their priorities were. It was also interesting to note the rather universally low priority given to training in rehabilitation of the socially and culturally deprived and of individuals from miniority groups.

In the study conducted to obtain suggested methods for improving workshop programs and increasing the number of clients served, it was interesting to note the differences between the views of area supervisors and workshop supervisors concerning priorities. Each of them tended to feel the major improvements could be made if the other would get his personnel to modify their procedures.

In research conducted at the Beaufort Research and Demonstration Program for dependents of military personnel, several significant differences were found in the characteristics of military dependents and non-military personnel served in the same program. Differences were found in patterns of family life, community involvement, child-discipline practices, vocational aspirations, and other characteristics.

Significant benefits were found to be derived when a six-man statelevel group made site visits to the rehabilitation programs in each area of the state as part of a statewide survey of service delivery systems. The comprehensive nature of these site visits and the atmosphere of cohesiveness helped to bring about a unified approach to the problems discussed and made it possible to arrive at universally accepted solutions.

Local personnel are found to take a more active part in helping to conduct follow-up research studies if preliminary steps are taken to prepare them for the activity and if the contribution they will be making to program improvement through their participation is stressed.

# CHAPTER 4: DISCUSSION

The significance of most of the activities described in the methodology section and the implications of the results reported in Chapter 3 are largely self-evident to anyone familiar with rehabilitation programs. A special effort was made in the previous chapter to state the findings in generalized conclusion form to make it easy for readers to judge for themselves the implications of the results for their own situations. It would be redundant to belabor in this chapter any of the results previously reported. Only a few additional thoughts will be discussed.

The writer's experience during the past four years and observations of other research and research utilization programs has led him to conclude that considerable attention needs to be paid to the atmosphere in which program evaluation is conducted. To gain the maximum cooperation and involvement of service personnel in operations research activities, it is necessary to develop an atmosphere which prompts them to examine their activities objectively and be willing to reveal their needs for program and personal growth. Unless this atmosphere of trust is created, personnel asked to participate in research activities tend to provide information which protects their positions and reinforces the status quo.

For almost two years, the Research and Planning Director also had responsibility for the agency's training program. During that time, the research utilization and staff development programs were intertwined in a unified effort. It is felt that there are advantages to having these programs in the same administrative unit if sufficient personnel are available to carry on all of the necessary activities. It is felt that this enhanced the position of the project director within the agency and increased his ability to stimulate research and the utilization of research findings.

Finally, it would seem fruitful to identify the "early innovators" and the supervisors most interested in improving their programs and have someone work with them to study strategies of bringing about change, techniques of involving community consultants, defining and meeting the needs of various types of clients, group work techniques, etc. It would help them to study how to serve as catalysts, change agents, linkers, and research utilization specialists. No matter how knowledgeable they may be in rehabilitation technology, it would seem beneficial for them to pause occasionally to take a fresh look at how people grow and develop. As they gain knowledge and proficiency in the strategies of change, it is felt that they would tend to become better equipped to make a significant contribution in the rehabilitation program and to reinforce the efforts of their employees and clients.

An increasing body of knowledge is being accumulated concerning the techniques of change agentry. This should be included as part of the staff development program if rehabilitation personnel are to become equipped to modify their patterns of behavior and incorporate research findings into new systems of rehabilitation.

# CHAPTER 5: SUMMARY

## A. OBJECTIVES AND PROCEDURES

A grant was received to establish an operations research program in the South Carolina Vocational Rehabilitation Department in August 1968. The goals of the program were to (1) stimulate and coordinate research activities throughout the state, (2) encourage the utilization of research findings, and (3) conduct research and demonstration activities within the State Vocational Rehabilitation program.

A well-qualified individual with a Ph.D. in Sociology assumed the position of project director and was employed on the state office staff as Research and Planning Director.

The project goals were reached by organizing a panel of research consultants, conducting research conferences, stimulating others to engage in research, reviewing a variety of material and communicating findings to rehabilitation workers, and training personnel to utilize research findings. In addition, a wide variety of program evaluation activities have been conducted to help administrative and supervisory personnel improve their program operations.

## B. IMPLICATIONS FOR ACTION

The operations research program has proven to be of value in the state rehabilitation agency, particularly in developing strategies for utilizing research findings in program and staff development. The value of an operations research program is influenced by a number of factors including the atmosphere within the agency, characteristics of the Research Director and the interest of personnel within the agency in improving their programs.

All levels of supervisors and practitioners should be trained to view themselves as change agents if they are to assist maximally in the process of translating research findings into modified staff and program procedures.

An atmosphere of trust in the Research Director and the administration is essential to obtain valid research information concerning program and staff development needs.

Rehabilitation personnel do not utilize already available information and need to be trained in interpreting and utilizing existing information before they are ready to absorb new research data.

## C. FINDINGS

### Stimulation and Coordination of Research

The demand for qualified research personnel exceeds the supply, thus causing the rehabilitation agency to compete with other agencies and organizations for their services.

Establishing priorities among the many topics suggested as possible research areas is not an easy task. The needs of administrative, supervisory and service personnel should all be taken into consideration.

A research advisory committee can be valuable in formulating research priorities and designs.

Utilization of Research

Research utilization efforts must be closely related with the in-service training program if they are to be effective.

The training of counselors and other service personnel was more effective when supervisors were included in the planning and pre-training sessions.

The need for improving communication skills was identified as one of the major personnel needs at all levels.

Establishing an Information Resource Center was found to be valuable but an extremely time consuming activity and should be undertaken only if substantial assistance is available.

Research briefs are read more frequently than lengthy reports but the process of preparing briefs was found to be quite time consuming.

Selective distribution of resource material was felt to be more effective than broader distribution.

Research and Demonstration Activities

A number of standard forms and reports were found to be more useful after modifying their titles, coded headings, dates, etc.

Supervisors need to be trained in interpreting and using standard forms and reports as management tools.

Staff development needs as perceived by counseling personnel, local supervisors, and state supervisors are highly correlated.

It was interesting to note the differences between the views of area supervisors and workshop supervisors concerning the best methods of improving workshop programs and increasing the number of clients served.

When comparing military dependents with non-military clients, differences were found in patterns of family life, community involvement, child discipline practices, vocational aspirations, and other characteristics.

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# APPENDICES

APPENDIX A

JOB DESCRIPTION OF DIRECTOR OF RESEARCH AND PLANNING

DEFINITION:

This is responsible, professional work of a research and planning nature. The employee in this class is responsible for planning, stimulating, directing and participating in a variety of studies, surveys, and projects of a research nature, the purpose of which is giving guidelines for the development of a statewide plan of comprehensive rehabilitation services. He serves as supervisor of this statewide development effort.

EXAMPLES OF WORK PERFORMED:

Supervises a department of research and statistics.

Consults with public and private agencies regarding program objectives and assessment.

Handles staffing problems and provides training for persons needing such within the department.

Engages in activities designed to increase training facilities for rehabilitation personnel within the state.

Prepares reports, publications, films, slides, and other techniques of imparting information obtained.

REQUIRED KNOWLEDGES, SKILLS AND ABILITIES:

Considerable knowledge of the coordination of research and planning efforts.

Considerable knowledge of principles and methods relating to the rehabilitation process.

Considerable knowledge of current social, economic, and health problems and resources with special emphasis on factors relating to vocational rehabilitation.

Knowledge of physical and mental illnesses and handicaps accompanying social implications.

Ability to establish and maintain effective interdepartmental and interagency working relationships.

Ability to make clear and pertinent statements orally and in writing.

DESIRABLE QUALIFICATIONS:

A Ph.D. degree in one of the following fields is suggested with at least a Master's degree and training in research required: sociology, psychology, research and statistics, counseling, social work, personnel, education, journalism, or public relations.

Some proven experience in conducting research and writing reports is necessary.

Six years of experience are required in rehabilitation or a closely related field such as teaching, counseling, social work, personnel management, student personnel, administration, journalism, or public relations.

APPENDIX B

BIOGRAPHICAL SKETCH

CHARLES S. CHANDLER, PH.D.
S. C. Vocational Rehabilitation Department

Dr. Charles S. Chandler, born 7-7-25, has demonstrated his competence in organizing and directing comprehensive planning, service, research and training programs. He is presently Director of Research and Planning, S. C. Vocational Rehabilitation Department and was formerly Director of the South Carolina Statewide Planning Program. He has a doctorate degree in sociology (Iowa State University - 1955) and an M.S. in Guidance and Counselin and in Clinical Psychology (Southern Illinois University - 1950). Academic specialities were community organization, communications research, and welfare administration.

He served four years as Director of Social Service in two Iowa institutions for the retarded and epileptics, conducting research on organizational and community procedures. He initiated and served for six years as coordinator of South Carolina's 50-man vocational rehabilitation program for psychiatric clients. For two years, was Chairman, Department of Sociology, Columbia College.

He has served fifteen years as research and training consultant to more than thirty Vocational Rehabilitation, SRS, NIMH, Law Enforcement, and School System research, demonstration, and training projects. He has a thorough understanding of the state's organizational structure and has established relationships with numerous governmental leaders, businessmen, agency administrators, professionals, and lay leaders. He has served as an active member of the American Sociological Association, American Association on Mental Deficiency, National Rehabilitation Association, S. C. Psychological Association, and S. C. Arthritis Foundation. He has served as an editorial consultant for the American Journal on Mental Deficiency and is editor of the research utilization newsletter The Change Agent.

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